

REMARKS

The Office Action dated December 27, 2004, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

Claims 1-12 are pending. Claims 1-8 and 10-12 are rejected. Claim 9 is objected to. Claims 1-12 are amended. Claims 13-20 are added. The specification has been amended. No new matter has been added.

Claims 4-7 are rejected by 35 U.S.C. §112, second paragraph, as being indefinite. Applicants submit that the amendments to claims 4-7 obviate the indefiniteness rejection. Accordingly, Applicants request reconsideration and withdrawal of the §112, second paragraph, rejection.

Claims 1-6, 8, 10 and 11 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0151748 to Jones *et al.* ("Jones"). Applicants respectfully traverse this rejection.

Applicants note that the gist of the present invention is a process that reduces the PFOA surfactant amount in gaseous streams coming from the drying plants of fluorinated polymers, since PFOA is biopersistent.

One feature of the presently claimed process is the aqueous solution, wherein the concentration of the fluorinated anionic surfactant (PFOA) removed from the gaseous stream is lower than or equal to 70 ppm. See, claim 1. According to the specification, page 7, lines 13-15, the above aqueous solution can be recycled during the continuous process until reaching the above surfactant concentration of 70 ppm. Then, the solution is treated to remove the surfactant. The specification on Table 1 on

page 24 clearly shows that, when the recovery solution contains more than 70 ppm of PFOA, the undesired PFOA would be found in the outlet stream.

In contrast, Jones provides that the scrubber solution can be recycled until the PFOA concentration reaches about 500 to about 5000 ppm, most preferably 2000 to 3000 ppm. See, Jones, paragraph 16, lines 7-11.

The Office Action alleges that Jones anticipates the present invention because the concentration of fluoride in the recovered surfactant solution is less than about 10 ppm. However, Applicants submit that Jones, at paragraph 19, cites the above concentration (i.e., no greater than about 10 ppm) of fluoride (not PFOA surfactant), not in reference to the scrubber aqueous solution, but rather in reference to the "recovered solution." Moreover, in paragraph 17, Jones discloses that the concentration process via reverse-osmosis (RO) of the scrubber solution for obtaining a recovered concentrated scrubber solution contains several hundred ppm fluoride. See, Jones, paragraph 17, lines 10-12. Moreover, Applicants note that due to the drawbacks indicated by Jones in the beginning of paragraph 18, said "recovered solution" (i.e., containing 2000-3000 ppm of PFOA as indicated above) is contacted with alumina only to reduce the fluoride concentration (e.g., HF).

The presently claimed invention is novel over Jones because the claimed concentration of PFOA surfactant in the scrubber solution (i.e., lower than or equal to 70 ppm) is distinguishable by orders of magnitude from the concentration (i.e., 500-5000 ppm) taught by Jones. Accordingly, Applicants request reconsideration and withdrawal of the anticipation rejection of claims 1-6, 8, 10, and 11.

Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Jones. Applicants respectfully traverse the obviousness rejection.

Applicants submit that one skilled in the art would not have found in Jones a teaching or suggestion that, when the recovery solution contains more than 70 ppm of PFOA, the undesired PFOA is still discharged in the environment. Applicants point out that the results of Table 1 of page 24 of the specification clearly show that when the recovery solution contains more than 70 ppm of PFOA, the biopersistent PFOA is still found in the outlet stream.

Applicants further note that all the Examples in Jones are directed to the treatment of concentrated scrubber solution with alumina in order to reduce the fluoride content of the scrubber solution and the use of the recovered surfactant (i.e., PFOA-1 and PFOA-2) in the polymerizations. However, Jones does not teach or suggest the previous step of obtaining the scrubber solution, except for the above cited concentration range 500-5000 ppm of PFOA. Accordingly, Applicants submit that Jones teaches away from the present invention since Jones teaches carrying out the scrubber process even when the PFOA concentration in the scrubber solution reaches up to about 5000 ppm. See, Jones, paragraph 16.

For the foregoing reasons, the presently claimed invention is not rendered obvious by Jones. Accordingly, Applicants request reconsideration and withdrawal of the obviousness rejection.

Claim 9 is objected to. With respect to claim 9, Applicants note that the independent claim on which claims 7 and 9 depend should be allowable by this

amendment. Accordingly, Applicants request reconsideration and withdrawal of the objection to claim 9.


Applicants similarly note that claim 7 should be allowable based on the amendments to overcome the 112, second paragraph, rejection.

In view of the above, Applicants respectfully submit that each of claims 1-20 recites subject matter that is neither disclosed nor suggested in the cited prior art. Applicants also respectfully request that claims 1-20 be found allowable and that this application be passed to issue.

If for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper has not been timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 108910-00109**.

Respectfully submitted,


Richard J. Berman
Registration No. 39,107

Customer No. 004372
ARENT FOX, PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 857-6395
RJB/RKC/RN/pdc